Proposed Project Number: 0203-30-02430

Subject: Image Structure Analysis

Sponsor: Central Intelligence Agency

Objectives: To put an existing "image quality meter" in operation with

the assistance of the manufacturer's representative, to prepare physical standards of granularity, acutance, and resolving power, to use these standards to calibrate the existing instrument, to request appropriate photography to be prepared and submitted by the sponsor, to request necessary specialized personnel from the sponsor for psychophysical evaluation of photographs, to evaluate the instrument calibration and psychophysical data and propose a means of correlation of instrument readings and image quality, to perform such tests as are required to evaluate the method of correlation, and to carry out such research and development as is required to implement the foregoing objectives.

Justification: The current and continuing need for the results of this investigation were expressed in a letter to the Director of NBS signed by the Director of Central Intelligence Agency. The objectives of this proposal are consistent with the objectives of the research program of the Photographic Research Section of NBS although acceleration in some areas and special calibrations will be demanded by this project.

Personnel Requirements: One photographic technologist full time, one Photographic technologist part time, supporting services of one chemist, one physicist, and supervision of the Chief of the Photographic Research Section.

Space Requirements: Suitable space is available within the current facilities of the National Bureau of Standards, Washington, D.C.

Supply Responsibility: The National Bureau of Standards will provide all supplies, power, equipment, space, personnel, and supervision with the exception of the image-quality meter, required field photography, and specialized personnel for image quality judgments, to be supplied by the sponsor.

Reports: Final report to be submitted July 1, 1963 or earlier unless other arrangements are agreed to.

Classification: The project is to be unclassified.

Cost: STATINTL